

Appl. No.: 09/956,998

Amdt. dated December 16, 2004

Reply to Communication of December 16, 2004

Amendments to the Claims:

1. (currently amended) A masked expression cassette comprising a double stranded nucleic acid molecule wherein a first strand comprises an RNA sequence which codes for a protein of interest linked downstream of a flanking sequence ~~having at least a portion of a target polynucleotide sequence~~, and a translation initiation site operably inserted upstream of the RNA sequence; and,
a second strand bound to the flanking sequence, wherein said second strand comprises a polynucleotide complementary to said first strand and to a target molecule, further wherein said cassette comprises a 7-methyl guanine cap linked to the 5' end of the flanking sequence.

2. (canceled)

3. (currently amended) The cassette of claim ~~[[2]]~~ 1, wherein said protein of interest comprises a toxin selected from the group consisting of Pseudomonas exotoxin A, ribonuclease, Barnase toxin, Pertussis toxin, and cholera toxin.

4. (currently amended) A masked expression cassette comprising a double stranded nucleic acid molecule comprising a first strand comprising a 5' sense sequence and a 3' sense sequence;

said first strand further comprising an RNA sequence which codes for a protein of interest linked downstream of said 5' sense sequence, and a translation initiation site operably inserted upstream of the RNA sequence; and,

~~[[the]]~~ a second strand bound to said 5' sense sequence and to said 3' sense sequence, wherein said second strand comprises a polynucleotide complementary to said 5' sense sequence and to said 3' sense sequence and to a target molecule.

5. (original) The cassette of claim 4, wherein said cassette further comprises a 7-methyl guanine cap linked to the 5' end of said nucleic acid molecule.

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6. (original) The cassette of claim 5, wherein said protein of interest comprises a toxin selected from the group consisting of Pseudomonas exotoxin A, ribonuclease, Barnase toxin, Pertussis toxin, and cholera toxin.

7. (previously presented) A masked expression cassette comprising a double stranded nucleic acid molecule wherein a first strand comprises an RNA sequence which codes for a protein of interest linked downstream of a plurality of sense sequences, and a translation initiation site operably inserted upstream of the RNA sequence; and,

a plurality of second strands, each bound to an individual sense sequence, wherein each of said second strands comprises a nucleotide sequence complementary to one of said sense sequences and to a target molecule.

8. (original) The cassette of claim 7, wherein said cassette further comprises a 7-methyl guanine cap linked to the 5' end of said nucleic acid molecule.

9. (original) The cassette of claim 8, wherein said protein of interest comprises a toxin selected from the group consisting of Pseudomonas exotoxin A, ribonuclease, Barnase toxin, Pertussis toxin, and cholera toxin.

10. (previously presented) The cassette of claim 8, wherein each of said sense sequences comprises a distinct nucleotide sequence and each of said second strands comprises a nucleotide sequence complementary to one of said distinct sense sequences and to a distinct target molecule.

11. (original) The cassette of claim 8 having two sense sequences and two second strands.

12. (original) The cassette of claim 8 having three sense sequences and three second strands.